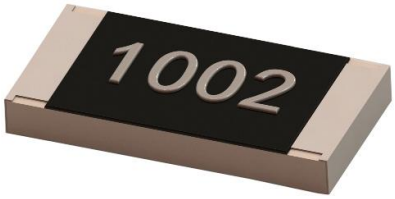
Fully Lead-free Thick Film Chip Resistor – BCTF Series



Features

- RoHS, Halogen Free and REACH Compliance
- High component and equipment reliability
- PCB space saving
- None forbidden-materials used in products/production

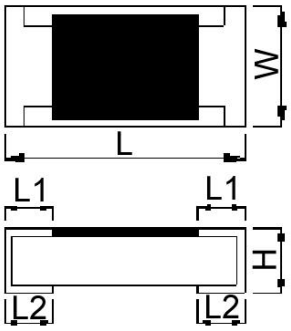
Applications

- All general purpose application

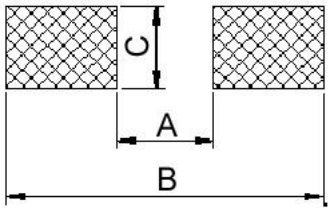
Product Identification

B	CTF	00	0805	-	10R2	F	TP
Grade	Product Series	Control Code	Dimensions Code	Special Code	Nominal Resistance	Tolerance	Taping Code
	Fully Lead-Free Thick Film Chip Resistors		1005		10R2=10.2Ω	D=±0.5%	H1 (20000Pcs) : 1005
			0201		1002=10KΩ	F=±1%	TH (10000Pcs) : 0201~0402
			0402			J=±5%	TP (5000Pcs) : 0603~1210
			0603				TE (4000Pcs) : 2010~2512
			0805				
			1206				
			1210				
			2010				
			2512				

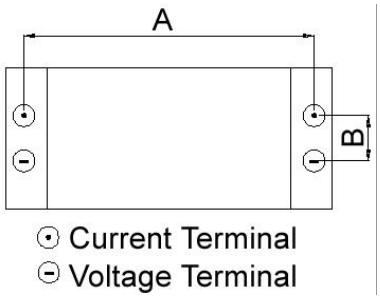
Configuration and Dimensions



Recommended Pattern



Measurement Point



Dimensions in mm

Type	Configuration and Dimensions					Recommended Pattern			Measurement Point	
	L	W	H	L1	L2	A	B	C	A	B
BCTF001005	0.40±0.02	0.20±0.02	0.13±0.02	0.10±0.03	0.10±0.03	0.2	0.5	0.2	-	-
BCTF000201	0.60±0.03	0.30±0.03	0.23±0.03	0.10±0.05	0.15±0.05	0.3	1.0	0.4	0.44±0.05	0.22±0.05
BCTF000402	1.00±0.10	0.50±0.05	0.30±0.05	0.20±0.10	0.25±0.10	0.5	1.5	0.6	0.80±0.05	0.24±0.05
BCTF000603	1.60±0.10	0.80±0.10	0.45±0.10	0.30±0.15	0.30±0.15	0.8	2.1	0.9	1.35±0.05	0.35±0.05
BCTF000805	2.00±0.10	1.25±0.10	0.50±0.10	0.35±0.20	0.35±0.15	1.2	3.0	1.3	1.80±0.05	0.35±0.05
BCTF001206	3.05±0.10	1.55±0.10	0.50±0.10	0.45±0.20	0.35±0.15	2.2	4.2	1.6	2.90±0.05	0.35±0.05
BCTF001210	3.05±0.10	2.55±0.10	0.55±0.10	0.50±0.20	0.50±0.20	2.2	4.2	2.8	2.90±0.05	0.35±0.05
BCTF002010	5.00±0.20	2.50±0.20	0.55±0.10	0.60±0.20	0.60±0.20	3.5	6.1	2.8	4.50±0.05	1.15±0.05
BCTF002512	6.30±0.20	3.20±0.20	0.55±0.10	0.60±0.20	0.60±0.20	3.8	8.0	3.5	5.90±0.05	1.60±0.05

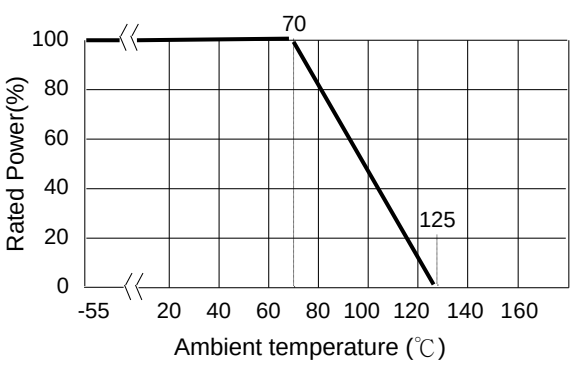
Electrical Characteristics Resistance Range: ≧1Ω & 0Ω

Type	Rated Power at 70℃ (W)	Working Voltage (V) Max.	Overload Voltage (V) Max.	T.C.R (ppm/℃)	Resistance Range (Ω)			JUMPER Rated Current (A)		JUMPER Resistance Value (mΩ) Max	
					±0.5% E-24、E-96	±1% E-24、E-96	±5% E-24	±5%	±1%	±5%	±1%
BCTF001005	1/32	15	30	-200+600	-	1≦R＜10	1≦R＜10	0.5	0.5	50	50
				±250	-	10≦R≦1M	10≦R≦1M				
BCTF000201	1/20	25	50	±250	15≦R≦1M	15≦R≦1M	15≦R≦1M	0.5	0.5	50	35
				±350	-	1M≦R≦10M	1M≦R≦10M				
BCTF000402	1/16	50	100	±200	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	1	1.5	50	20
				±300	-	2.2M≦R≦10M	2.2M≦R≦10M				
BCTF000603	1/10	75	150	±150	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	1	2	50	20
				±250	-	2.2M≦R≦10M	2.2M≦R≦10M				
BCTF000805	1/8	150	300	±150	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	2	2.5	50	20
				±250		2.2M≦R≦10M	2.2M≦R≦10M				
BCTF001206	1/4	200	400	±150	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	2	3.5	50	20
				±250	-	2.2M≦R≦10M	2.2M≦R≦10M				
BCTF001210	1/2	200	400	±150	10≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	2	4	50	20
				±250	-	2.2M≦R≦10M	2.2M≦R≦10M				
BCTF002010	3/4	200	400	±150	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	2	5	50	20
				±250	-	2.2M≦R≦10M	2.2M≦R≦10M				
BCTF002512	1	200	400	±150	1≦R≦2.2M	1≦R≦2.2M	1≦R≦2.2M	2	7	50	20
				±250	-	2.2M≦R≦10M	2.2M≦R≦10M				
Operating Temperature Range				-55℃ ~ +155℃ (1005、0201:-55℃ ~ +125℃)							

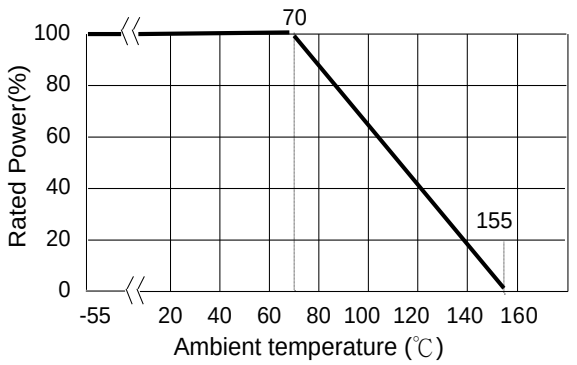
Note: When ordering, please specify tolerance code. Tolerance: D=±0.5%, F=±1%, G=±2%, J=±5%,

- Power Derating Curve: Operating Temperature Range: -55℃ ~ +155℃
  For resistors operated in ambient temperatures 70°C, power rating shell be derated in accordance with the curve below:

1005、0201 (-55℃~ +125℃)



other (-55℃~ +155℃)



- Rating Current: The resistor shall have a DC continuous working current or a rms. AC continuous working current at commercial-line frequency and wave form corresponding to the power rating, as determined from the following:
  Remark: E: Rated voltage.(V) , P: Rating Power.(W), R: Nominal Resistance.(Ω)

$$E = \sqrt{R \times P}$$